

Remarks

With the cancellation of claims 25, 28, 29, and 43-47, claims 24, 26, 27 and 30-42 are now pending in the above referenced application.

Regarding U.S. Patent No. 4,040,171 (the '171 patent'), this patent relates to the manufacture of Zener diodes, in particular also the combination of a plurality of Zener diodes, to achieve a breakdown voltage, which is additively made up of the number of Zener diode combination. It is also taken into account that two physical fundamentals are relevant in Zener diodes, namely the breakdown voltage due to a beginning tunnel effect of charge carriers in the barrier layer, and the breakdown voltage due to the actual Zener effect. Both effects differ in their temperature response. By suitable combination of the two effects it is possible to obtain an overall temperature response that has predefinable characteristics. Applicants submit that nothing in the '171 patent, or any of the other references relied on by the Examiner, teaches amended claim 24. Specifically, Applicants submit that none of the references teaches "the n-doped semiconductor layers form[ing] at least two groups that are doped at different concentrations."

The present invention is new, non-obvious, and useful. Reconsideration and allowance of the presently pending claims are respectfully requested.

Respectfully submitted,

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